Tomato Nutrient Absorption and Nutsedge (*Cyperus* spp.) Management with Propylene Oxide

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Among the current methyl bromide alternatives under study, propylene oxide (Propozone™) has shown potential to control soilborne diseases, nematodes, and weeds in polyethylene-mulched tomato. However, further research is needed to determine the appropriate application rates to control nutsedge in the crop. Also, the effect of this fumigant on tomato nutrient absorption has not been determined yet. Therefore, field trials were conducted for this purpose in Bradenton, Florida, USA. Tested rates of Propozone were 0, 190, 380, 570, 760, and 950 L/ha and were shank-applied in raised planting beds three weeks before 'Florida 47' tomato transplanting. Examined data indicated that there was a rapid decrease in nutsedge density with 570 L/ha. For phosphorus (P) and potassium (K) foliar content, there was a linear increase of P concentrations as rate increase, whereas K content increased rapidly after 190 L/ha. The highest tomato yields were obtained with 760 and 950 L/ha of Propozone.